DRAFT NNM09277065J ATTACHMENT – J-6

Application Point Requirements

1.0 Application Point Concept

Service requests, which comprise both PWS 3.1 Applications Maintenance and PWS 3.2 Applications Enhancement work, represent the core unit of work delivered by the NEACC factory. In a fixed price model, where the precise volume of work produced by the factory must be readily measurable, completed service requests must be converted into consistently quantifiable units of work. Because service requests can vary greatly in terms of scope and complexity, any given software release could contain multiple combinations of service request types and sizes. To normalize service requests so that any request can be efficiently converted into consistently quantifiable units of work, the Government has established a framework based on the utilization of Application Points. The Application Point concept is described in detail below.

1.1 Application Point Complexity Factors

Application Points offer a method for representing the complexity of a service request and for measuring the realized value of the work performed to complete the request. In this method, service requests are assigned a set number of Application Points based on their complexity. As depicted in the conversion table below, any request that meets the majority of the criteria listed under the Low Category in the Complexity Definitions in Appendix A is assigned 5 Application Points. Service requests that meet the majority of the criteria for the Medium category are assigned 25 points and those that meet the majority of the criteria for the High category receive 125 points.

A new Low Complexity service request is always assigned a full 5 Points, regardless of whether it may appear to be more or less complex than other Low Complexity service requests. The same approach holds true for Medium and High Complexity service requests. The assignment of an equal number of relative Application Points to all requests within the same Complexity Factor category, regardless of their comparable complexities within the category, is manageable and results in a natural leveling effect over time.

All Master Data/Job Request service requests must be completed as part of PWS 3.1 Applications Maintenance and shall not factor in to the PWS 3.1 Application Point lower and upper band limits.

It is a common practice for service requests to be combined where efficiencies can be gained by working the requests as part of a consolidated release/build. When service requests are combined a re-evaluation of the overall Application Points allocated to the package shall occur.

The complete description of each Complexity Factor is provided in Appendix A of this document.

ATTACHMENT – J-6 Application Point Requirements

Complexity Factor	Short Description	Application Points
Low	Service request is readily understood, requires isolated changes, does not impact other objects or require multiple skill sets.	5
Medium	Service request requires investigation, touches multiple components, impacts other objects, and requires multiple skills sets.	25
High	Service request requires major investigation, major planning across multiple skill sets, large numbers of impacted components, lengthy integration testing required.	125

Complexity Factor	Short Description	Application Points
Master Data /	Request to add or modify master data or to complete a job	0
Job Request	request.	

Figure 1: Application Point-to-Complexity Factor Conversion Method

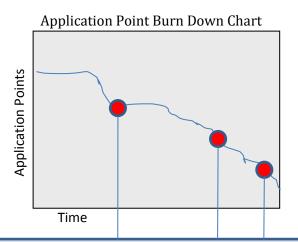
1.2 Application Point Burn Down

As service requests are worked, resulting in delivered functionality (realized value) and reduced remaining complexity, Application Points are burned down. Burn down rates must be tracked for PWS 3.1 Applications Maintenance (excluding Master Data / Job Requests) and PWS 3.2 Applications Enhancement service requests, so that the overall stage of completion for each service request can be accurately gauged at any time. Tracking burn down rates also provides insight into available capacity across the EAST Delivery Functions.

For the PWS 3.1 Applications Maintenance area, the primary reason for tracking Application Point burn down is to understand available capacity.

For the PWS 3.2 Applications Enhancement area, tracking Application Point burn down facilitates capacity planning as well as the Contractor's monthly billing process. Accurate burn down data allows NEACC Demand Managers, working collaboratively with the Contractor, to assign new work requests as capacity becomes available. The burn down rate also reflects the rate at which Application Points are considered complete for PWS 3.2 monthly billing purposes.

ATTACHMENT – J-6 Application Point Requirements



At the time intervals indicated by the red dots, work has progressed on one or more requests to the point where some of their Application Points have been burned down (e.g. specific deliverables associated with the request have been completed, while others are still in process). Even though the request is not complete, the Contractor receives credit for the Application Points that were accomplished and has capacity to start new work.

Figure 2: Application Point Burn Down Concept

The Contractor shall describe their method for tracking Application Point burn down in DRD 1293MA-007 - *Application Point Capacity Management Plan*. The Contractor's burn down method should address the following guidelines.

1.2.1 Application Point Burn Down Guidelines

The goal of work performed within the NEACC factory is to provide business value to end-users by deploying successfully completed service requests. While management of NEACC factory capacity and the EAST contract requires the tracking of Application Point burn down, the focus of work should <u>not</u> be solely on burning down points, but rather on delivering business value in the form of completed and fully deployed functionality.

1. Burn Down Should Be Tied to Milestones

The burn down of points should coincide with milestones that occur along the path to delivering the completed service request. Since the delivery of business value—through working application functionality—is of higher value than the accomplishment of tasks, it is preferred that the milestones used to track burn down be tied to delivered, working, tested application components rather than to phases in a Software Development Lifecycle. For example, a milestone that tracks a functional or product owner's satisfaction with a successfully completed user story is better than a milestone that tracks software design completion.

ATTACHMENT - J-6

Application Point Requirements

2. Point Adjustments May Be Necessary

a. Replenishing Points to an In-Process Request

Situations will arise in which a service request may need to have additional Application Points added to it after it is already in process. This situation can occur, for example, if the request is partially completed, but a functional review results in new, or refined, requirements or specifications that require re-work or work that was not accounted for in the original complexity assessment. This situation can also occur if, during work on the request, it becomes evident that the request is of a higher complexity than originally assessed.

b. Lowering of Points to an In-Process Request

Situations will arise in which a service request may need to have a reduction of Application Points after it is already in process. This situation can occur, for example, if the request is partially completed, but a functional review results in deleted requirements or specifications that reduces the original complexity assessment. This situation can also occur if, during work on the request, it becomes evident that the request is of a much lower complexity than originally assessed.

3. Applying Lessons Learned to Application Point Assessments

Periodic review of Application Point assessments should be conducted to ensure that the assessment model utilized reflects the capacity and velocity of the factory. As lessons learned are applied and learning curves are improved, adjustments to the assessment model may be required.

4. Points Reserved for Completion

Regardless of how many Application Points have been burned down in association with a service request, the full value of a service request is not realized until the request is complete (and successfully deployed). To avoid a situation where all Application Points have been burned down—and therefore earned—but where the service request remains incomplete, there must be a mechanism for reserving a percentage of the service request's overall Application Points so that they can only be burned down upon successful completion of the service request.

1.3 Application Point Requirements

During operations, the Contractor shall apply the Complexity Factor—to—Application Point conversion method to assign Application Points to each incident and service request associated with PWS 3.1 (Applications Maintenance) and PWS 3.2 (Applications Enhancement).

DRAFT NNM09277065J ATTACHMENT – J-6

Application Point Requirements

1.3.1 PWS 3.1 – Applications Maintenance

The Contractor is responsible for completing all Applications Maintenance work under PWS 3.1. As work is assessed and performed, the Contractor shall assign Application Points to all incidents and shall track burn down rates. During performance of this contract the number and types of Applications Maintenance service requests will vary. As long as the Contractor's Application Point completion rate for PWS 3.1 is not less than or greater than the lower and upper limits defined below during a contract year all efforts within these limits shall not give rise to an equitable upward or downward adjustment to the contract price or other contract terms and conditions.

	<u>Annual</u>
Lower Limit Application Points	250,000
Upper Limit Application Points	275,000

1.3.2 PWS 3.2 – Applications Enhancement

For PWS 3.2, the Contractor shall complete, on a monthly basis, a number of Application Points that falls within the lower and upper limits defined below. Application Points that have been completed on fully delivered service requests and on service requests that are still in process, will count towards the monthly Application Point requirement. For service requests that are still in process at the end of the measurement period, the Contractor must provide objective evidence of the conversion of Application Points to working functionality (realized value) in a credible manner and must be capable of demonstrating the completed functionality to the Government. The Contractor shall provide objective evidence at the end of the monthly measurement period to support the number of Application Points completed, in accordance with DRD 1293MA-007 - Application Point Capacity Management Plan.

	<u>Monthly</u>
Government Defined Lower Limit Application Points	9,800
Contractor Lower Limit Application Points	TBP*
Upper Limit Application Points	11,000

^{*}Note to Offeror: The Offeror's proposed monthly lower Application Point limit shall be greater than or equal to the Government defined monthly lower Application Point limit, in accordance with <u>L.31</u>, Section 9, Tab B.

ATTACHMENT – J-6

Application Point Requirements

1.3.3 PWS 3.2 Additional Resource Charges and Reduced Resource Credits (ARCs and RRCs)

Should the Government face short-term peak demand that results in temporary increased capacity requirements which are over the monthly PWS 3.2 Application Point upper limit, the Government may utilize additional Points during a month based on a pre-priced Application Point Unit Price. The utilization of additional points would constitute an Additional Resource Charge (ARC).

- ARCs are calculated as follows:
 - Determine the quantity of Application Points completed for the month beyond the Upper Band Limit
 - Multiply the resulting number by the Application Point Unit Price

The Contractor shall provide the Government with a Reduced Resource Credit (RRC) in accordance with Clause <u>B.6</u> when the number of completed Application Points falls below the monthly PWS 3.2 Application Point lower limit.

- RRCs are calculated as follows:
 - Subtract the quantity of completed Application Points from the Lower Band Limit to determine the shortfall
 - Multiply the resulting number by the Application Point Unit Price

1.4 PWS 3.2 Application Point Operating Model

Figure 3 depicts the operating model for processing Applications Enhancement service requests as part of typical NEACC factory operations. NEACC Demand Managers—as described in Attachment <u>J-1</u>, *PWS Section 1.3.2*—control the flow of Applications Enhancement service requests into the Contractor's work queue. Demand is controlled based on a number of factors, including: the priority and complexity of service requests in the backlog, the constraints of release packaging, the Contractor's available capacity based on the number of Application Points in process, and the availability of specific Contractor Delivery Functions to accomplish the queued up work.

Throughout the process, the Contractor shall perform the necessary capacity forecasting and scheduling activities to ensure that enough Application Enhancement service requests flow into their work queue to result in the completion of sufficient Application Points to meet the monthly requirement defined in Section 1.3.2. Items that require input from sources beyond the Contractor's control shall be placed in an inactive status. The Contractor shall provide a process for credibly demonstrating all Application Points that have been completed in accordance with DRD 1293MA-007 - Application Point Capacity Management Plan.

DRAFT NNM09277065J

ATTACHMENT – J-6 Application Point Requirements

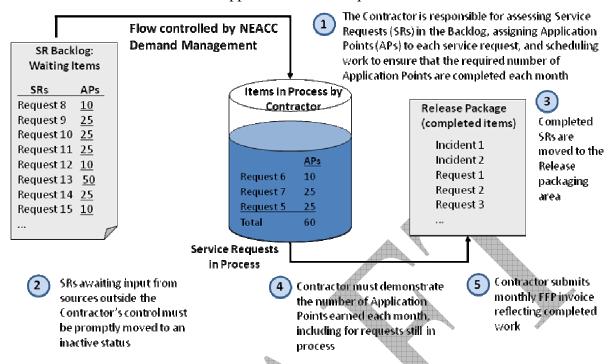


Figure 3: PWS 3.2 Application Point Operating Model



DRAFT NNM09277065J

ATTACHMENT – J-6 Application Point Requirements

Appendix A: Complexity Definitions

Master Data / Job Request (0 Application Points):

 Request for additions or modifications to master data or for the initiation and completion of a job request

Low (5 Application Points):

- Nature of the discrepancy or request is readily understood by resource(s) from the following Delivery Functions, depending on the nature of the request: Application Functional Support, Application Development, Application Technical Operations & Maintenance, and Information Assurance
- Requires a minor change to application code or other configurable item, or minor investigation and/or break/fix work that can be executed with relative ease by one or more of the experienced resources from the Delivery Functions listed above
- Application changes or corrections are isolated to individual components and do not impact other integrated areas of the application or other applications
- Changes or fixes require unit and functional testing, but do not require complex integration testing
- Requires no or very minor changes or additions to end user procedures or other documentation
- If code migration is required, the transport build list is of low complexity

Medium (25 Application Points):

- Nature of the discrepancy or request requires investigation/coordination by resource(s)
 from the following Delivery Functions, depending on the nature of the request: Application
 Functional Support, Application Development, Application Technical Operations &
 Maintenance, Information Assurance and Factory Management
- Involves limited Requirements Management activity
- Requires a change to application code or other configurable item(s), or investigation and/or break/fix work that entails significant effort by experienced resource(s) from the Delivery Functions listed above
- Application changes affect large or multiple components and may have minor impacts on other integrated areas of the application or other applications.
- Changes or fixes require unit and functional testing, as well as more complete integration testing
- Requires some changes or additions to end user procedures or other documentation or other limited Business Readiness mitigation activities
- If code migration is required, the transport build list is of medium complexity

DRAFT NNM09277065J ATTACHMENT – J-6

Application Point Requirements

High (125 Application Points):

- Nature of the discrepancy or request requires a major investigation/coordination effort by multiple skilled resource(s) from the following Delivery Functions, depending on the nature of the enhancement: Application Functional Support, Application Development, Application Technical Operations & Maintenance, Information Assurance, and Factory Management
- Involves extensive Requirements Management activity
- Requires a change to application code or other configurable item(s), or investigation and/or break/fix work that entails a large effort by a set of experienced resources from the Delivery Functions listed above
- Application changes or fixes affect large or multiple components and may have broad impacts on other integrated areas of the application or other applications
- Changes and fixes require unit and functional testing, complete integration testing, and possibly regression testing
- Requires extensive changes or additions to end user procedures or other documentation or significant Business Readiness mitigation activities
- If code migration is required, the transport build list is of high complexity

